

Pratyush Bindal

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Education

Birla Institute of Technology and Science, Pilani <i>Bachelor of Engineering in Computer Science (CGPA: 9.61 / 10.00)</i> <ul style="list-style-type: none">Relevant Coursework: Data Structures and Algorithms, Artificial Intelligence, Machine Learning, Database Systems, Object Oriented Programming, Operating Systems, Computer Architecture, Computer Networks	Aug 2022 - July 2026 Hyderabad, Telangana
G. D. Goenka Public School <i>High School (Class XII: 96.6% and Class X: 97.6%)</i>	April 2018 - July 2022 Muzaffarnagar, Uttar Pradesh

Experience

Software Engineer Intern <i>Microsoft</i> <ul style="list-style-type: none">Performed detailed startup analysis using profiling tools to identify performance bottlenecks and latency issues in large-scale Android applicationsContributed to critical code optimisations and streamlined execution flows to improve startup performance and enhance overall application responsiveness	May 2025 – July 2025 Hyderabad, Telangana
Undergraduate Teaching Assistant - BITS F464 (Machine Learning) <i>Birla Institute of Technology and Science, Pilani</i> <ul style="list-style-type: none">Created practice sets, designed assignments, and provided conceptual support to over 150 students on advanced Machine Learning topics	Jan 2025 – May 2025 Hyderabad, Telangana
Summer Research Intern <i>Indian Institute of Remote Sensing (IIRS), Indian Space Research Organisation (ISRO)</i> <ul style="list-style-type: none">Led a 4-member team in implementing Transformer-based (Grounding DINO) and CNN-based (YOLOv8, v9, v10) computer vision models for ship detection and automatic feature extraction from satellite images	May 2024 – July 2024 Dehradun, Uttarakhand
Undergraduate Teaching Assistant - PHY F111 (Mechanics, Oscillations and Waves) <i>Birla Institute of Technology and Science, Pilani</i> <ul style="list-style-type: none">Prepared study materials, helped conduct evaluations, and mentored nearly 500 undergraduate students	Aug 2023 – Dec 2023 Hyderabad, Telangana

Skills

Languages: C, C++, Java, Python, HTML, CSS, SQL, JavaScript, TypeScript, Prolog, Verilog HDL, Assembly
Frameworks, Libraries & Tools: React, SolidJS, Spring Framework, TensorFlow, PyTorch, Simpleperf
Databases: Oracle MySQL, PostgreSQL, Supabase, Firebase Realtime DB, MongoDB

Projects

DRL-based Anomaly Detection in WBANs [Patent IDF Filed] <i>Python, React, PyTorch and related libraries</i> <ul style="list-style-type: none">Designed a novel deep reinforcement learning framework for anomaly detection in healthcare-focused WBANsBuilt a full-stack web application with an interactive frontend, model-integrated backend, and LLM-powered assistant for user query resolution
Reinforcement Learning In Cybersecurity <i>Python, PyTorch and related libraries</i> <ul style="list-style-type: none">Implemented AE-SAC and Twin Delayed DDPG (TD3) Algorithms on the NSL-KDD Dataset for Intrusion DetectionEstablished ML-based Intrusion Detection System on the NSL-KDD Dataset to map alert-attack relations
BITSBids <i>React, Spring Framework, Mongo DB, Maven</i> <ul style="list-style-type: none">Developed ready-to-scale Full Stack Bidding Website exclusive to BITSians via Google OAuth2 AuthorisationApplied Dynamic Price Updation, Multiple Bids Prioritisation, Anonymous Chat Client, and Filtered Product Search
StarWars Databank <i>Typescript, SolidJS, Supabase, PL/pgSQL</i> <ul style="list-style-type: none">Contributed to a DataBank Website for storing, analysing, and categorising information about the Star Wars worldCreated Frontend using SolidJS & used PostgreSQL in Supabase for developing backend database system

Honours and Awards

- 100% Merit & 80% Merit-cum-Need Scholarships Awardee (Awarded to top 1% & top 3% of the batch respectively)
- Ranked among top 255 nationally in IOQA 2020-21 conducted by IAPT-HBCSE